UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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44654 7590 09/10/2007		EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>07 June 2007</u>.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>*1-27*</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>*1-27*</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____.

        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date <u>6/7/07</u>.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER
CENTER 2100

DETAILED ACTION

1.   Claims 1-27 are pending in the application.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3.   Claims 5-8, 13-16 and 23-26 are rejected under 35 U.S.C. 112, second paragraph, as

being indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

        a.   The following claim language is indefinite:

                i.   As per claims 5, 13 and 23, it is uncertain what "an industry standard for

        workflow management" includes or excludes (i.e. the examiner is unable to

        determine the metes and bounds of the claim because any industry standard can

        evolve over time, therefor objects based upon an industry standard that is subject

        to change is indefinite). Moreover, there are multiple industry standards for

        workflow management as well as many standards covering the components of

        workflow systems.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 1-2, 9-10 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Belknap et al (hereafter Belknap) (U.S. Patent 6,516,356), in view of Applicant Admitted Prior Art (hereafter AAPA).

6.   As to claim 17, Belknap teaches the invention substantially as claimed including a computer implemented method for integrating workflow engines comprising:

creating a public API for at least two heterogeneous media devices, wherein the public API comprises a set of generic objects,

wherein said set of generic objects represent functional characteristics common to said at least two heterogeneous media devices [10, 15, 25 Fig. 25; abstract, lines 4-6; col. 1, lines 47-49; col. 2, lines 44-47],

wherein each of said at least two heterogeneous media devices has an associated application program interface and a set of native objects [15, 22, 25, Fig. 1];

interfacing said public API with said at least two heterogeneous media devices through said associated device API for each of said at least two media devices [22, 25, Fig. 1; col. 3, lines 11-14; col. 5, lines 57-59];

mapping said set of generic objects to native objects of each of said at least two heterogeneous media devices [abstract, lines 7-9; col. 1, lines 51-54; col. 3, lines 2-19, 26-33; col. 5, lines 55-57].

7.   Belknap does not specifically teach workflow engines nor wherein each of the at least

two heterogeneous underlying workflow engines is a computer executable application program

operable to manipulate content items in accordance with a process definition. However, AAPA

teaches heterogeneous workflow engines [AAPA, pg. 2, paragraphs 4-5; pg. 3, paragraph 7, lines

8-10].

8.   It would have been obvious to one of an ordinary skill in the art at the time the invention

was made, to have modified the teaching of AAPA with the teaching of Belknap because both

AAPA and Belknap are concerned with the inefficiency of individually communicating with

disparate entities (i.e. different media servers, vendor specific workflow engines) taking into

account the unique characteristic of each individual entity and the teaching of Belknap can

further enhance the teaching of AAPA by overcoming the need to continuously update

applications in order to utilize a new or updated proprietary device/application by providing a

common API [col. 1, lines 23-34; AAPA, pgs. 2-3, paragraphs 5-6].

9.   As to claim 18, Belknap as modified teaches the invention substantially as claimed

including:

        persistently maintaining a generic object; and delegating at least a portion of said set of

generic objects to a set of corresponding native objects at one or more of said underlying

workflow engine [col. 2, line 58-col. 3, line 13; AAPA, pg, 2, paragraphs 4, 6-7] (Examiner's

interpretation of "persistently maintaining," as any action/non-action that ensure the continue

existence of the object since the applicant did not preclude nor define this limitation).

10.   As to claim 19, this claim is rejected for the same reason as claim 18 above.

11.   As to claim 1, this claim is rejected for the same reason as claim 17 above. In addition,

Belknap as modified teaches a plurality of adapters [15, Fig. 1; col. 1, lines 51-54].

12.   As to claim 2, this claim is rejected for the same reason as claims 1, and 17-19 above.

13.   As to claim 9, this claim is rejected for the same reason as claims 1 and 17 above.

14.   As to claim 10, this claim is rejected for the same reason as claim 2 above.

15.   Claims 5-7, 13-15, 20, 23-25 and 27 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Belknap and AAPA as applied to claims 1, 9 and 17 above, further in view of

Schechter et al (hereafter Schechter) (U.S. PG Pub 20020133635 A1).

16.   Schechter was cited in the last office action.

17.   As to claim 20, this claim is rejected for the same reason as claim 17 above. Belknap and

AAPA do not specifically teach mapping said native result to a generic result usable by a generic

object from said set of generic objects. However, Belknap disclosed interact with media servers having different operational characteristics [col. 6, lines 30-33]. In addition, Schechter teaches transforming responses from devices having different capabilities into information usable by an application program running on the server [Schechter, pg. 3, paragraph 29, lines 5-13]. It would have been obvious to one of an ordinary skill in the art at the time the invention was made, to have combined the teaching of Belknap, AAPA and Schechter because the teaching of Schechter further enhances the teaching of Belknap and AAPA by providing intercommunication between the requesting application and the different media devices.

18.   As to claim 23, Belknap, AAPA and Schechter do not specifically teach wherein said set of generic objects is maintained based upon an industry standard for workflow management. However, Belknap as modified disclosed the APIs correspond to different member functions of different classes, workflow management, and standards developed for the representation and implementation of workflow products interface [col. 3, line 33-col. 5, line 41; AAPA, pg. 2, paragraph 3 and pg. 4, paragraph 9]. It would have been obvious to one of an ordinary skill in the art at the time the invention was made, to have recognized that the generic object have to be based upon an industry standard (i.e. standards promulgated by the Workflow Management Coalition are well know in the art) for workflow management to overcome the restriction due to the different vendor implementations (i.e. to allow maximum compatibility between generic objects and proprietary objects).

19.   As to claims 24-25, these claims are rejected for the same reason as claim 23 above.

20.   As to claims 5-7, these are system claims that correspond to method claims 23-25 above.

Therefore, they are rejected for the same reason as claims 23-25 above.

21.   As to claims 13-15, these are system claims that correspond to method claims 23-25.

Therefore, they are rejected for the same reason as claims 23-25 above.

22.   As to claim 27, this claim is rejected for the same reason as claims 17 and 20 above. In

addition Belknap as modified teaches wherein workflow engine APIs of said at least two

heterogeneous workflow engines are vendor-specific [col. 1, lines 23-34; AAPA, pgs. 2-3,

paragraphs 5-6].

23.   Claims 8, 16, 21-22 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Belknap, AAPA and Schechter as applied to claim 20 above, further in view of Parnell et al

(hereafter Parnell) (U.S. Patent 6,647,396).

24.   Parnell was cited in the last office action.

25.   As to claims 21-22, Belknap, AAPA and Schechter do not specifically teach wherein said

set of generic objects further comprises a payload object, and wherein said payload object

associates a set of content items with a process instance. However, Belknap disclosed

identifying whether the media object is located locally within the object store or at a remote

location [col. 7, lines 4-8]. In addition, Parnell teaches applying content management to

workflows [Parnell, col. 3, lines 5-12]. It would have been obvious to one of an ordinary skill in

the art at the time the invention was made, to have combine the teaching of Parnell with the

teaching of Belknap, AAPA and Schechter to include a payload object that associate a set of

content items with a process instance given that the content might have been access previously or

will be access multiple times.

26.   As to claim 26, this claim is rejected for the same as claims 21-23 above.

27.   As to claim 8, this is a system claim that corresponds to method claim 26. Therefore, it is

rejected for the same reason as claim 26 above.

28.   As to claim 16, this is a system claim that corresponds to method claim 26. Therefore, it

is rejected for the same reason as claim 26 above.

29.   Claims 3-4 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Belknap and AAPA as applied to claims 1 and 9 above, further in view of Parnell et al (hereafter

Parnell) (U.S. Patent 6,647,396).

30.   As to claims 3-4, Belknap and AAPA do not specifically teach wherein said set of

generic objects further comprises a payload object, and wherein said payload object associates a

set of content items with a process instance. However, Belknap disclosed identifying whether

the media object is located locally within the object store or at a remote location [col. 7, lines 4-

8]. In addition, Parnell teaches applying content management to workflows [Parnell, col. 3, lines

5-12]. It would have been obvious to one of an ordinary skill in the art at the time the invention

was made, to have combine the teaching of Parnell with the teaching of Belknap and AAPA to

include a payload object that associate a set of content items with a process instance given that

the content might have been access previously or will be access multiple times.

31.   As to claims 11-12, these claims are rejected for the same reason as claims 3-4 above.

Response to Arguments

32.   Applicant's arguments filed 6/7/07 have been fully considered but they are not

persuasive.

33.   In the remarks, Applicant argued in substance that:

a.   Applicant respectfully disagrees that objects based upon an industry standard is

indefinite and breadth of a claim is not to be equated with indefinite.

b.   Examiner failed to established a prima facie case of obviousness against claims 1-

27, and there is no apparent reason to combined Belknap and AAPA.

c.   The combination of Belknap and AAPA is silent as to how a public API for

heterogeneous workflow engines can be created. Belknap does not teach or suggest APIs

for workflow engines.

34.   Examiner respectfully traversed Applicant's remarks:

35.   As to point (a), the examiner respectfully disagrees and submits that if the industry

standard for workflow management does evolve over time (i.e. to a standard not yet exist but

assuming will exist in the future), the set of objects based upon such future industry standard

which neither the applicant nor the examiner have any knowledge of lacks metes and bounds and

therefore, indefinite. In addition, the subject of discussion is the specificity of the claimed

limitations and not the breadth of the claim, therefore, the rejection is proper.

36.   As to point (b), given that both AAPA and Belknap are concerned with the inefficiency

of individually communicating with heterogeneous entities (i.e. different media servers, vendor

specific workflow engines) taking into account the unique characteristic of each individual

entity, one of ordinary skill in the art would be motivated to modify the teaching of AAPA with

the teaching of Belknap because doing so would enhance the teaching of AAPA by overcoming

the need to continuously update applications in order to utilize a new or updated proprietary

device/application by providing a common API [col. 1, lines 23-34; AAPA, pgs. 2-3, paragraphs

5-6].

37.   As to point (c), the outstanding rejection is a 35 USC 103 rejection based on the

combination of AAPA and Belknap. The creation of the public API for heterogeneous workflow

engine is based upon the integration of AAPA's workflow engine with the creation of a public

API as being taught by Belknap. In addition, applicants argue the patentability of various claims,

by individually addressing the reference used to reject the claims. Applicant cannot show

nonobviousness by attacking the references individually where, as here, the rejection is based on

a combination of references. See In re Keller, 208 USPQ 871 (CCPA 1981). Belknap was

brought in solely for the purpose of the creation of a common API to facilitate communication

among heterogeneous entities, and the limitations argued are nonetheless been addressed by the

combination of Belknap and AAPA.

38.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

39.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Qing-Yuan Wu whose telephone number is (571) 272-3776. The

examiner can normally be reached on 8:30am-6:00pm Monday-Thursday and alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Qing-Yuan Wu

Examiner

Art Unit 2194

WILLIAM THOMSON
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